DOCUMENT RESUME

ED 136 919 PS 009 163

AUTHOR Fagot, Beverly I.
TITLE Sex Determined Parental Reinforcing Contingencies in Toddler Children.
PUB DATE Mar 77
NOTE 13p.; Paper presented at the Biennial Meeting of the Society for Research in Child Development (New Orleans, Louisiana, March 17-20, 1977)

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Check Lists; Child Rearing; *Early Childhood Education; Interaction Process Analysis; Observation; Parent Attitudes; *Parent Child Relationship; Parent Influence; *Reinforcement; *Sex Differences; *Sex Role; Sex Stereotypes; *Socialization

ABSTRACT

This study was designed to examine the reinforcing contingencies of parents toward specific child behaviors, and at the same time to try to determine if the sex of the child performing the behavior influences the reaction of the parent. A total of 24 white families with only one child between the ages of 20 and 24 months participated in the study. Half of the families had one boy and half had one girl. A checklist of 46 child behaviors and 20 parent reactions was used to observe the parents with the child in their home. Five 60-minute periods of observation were completed for each family during a 5-week period. After the observations were complete, each parent was asked to rate the 46 child behaviors on the checklist as appropriate for girls, boys, or both sexes. Each parent also filled out a short questionnaire concerning socialization practices and values concerning sex roles. The results indicated that when parental responses to all the behaviors on the checklist were considered, girls and boys were being treated in a very similar fashion. However, when only behaviors which one sex engaged in significantly more often than the other (i.e., sex-preferred behaviors) were considered, the findings showed quite distinct sex determined differences in parents' reactions. It was suggested that these sex determined differences with regard to sex-preferred behaviors could have significant socialization effects in spite of the overall similarity of parental treatment of boys and girls. (JMB)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED136919

SEX DETERMINED PARENTAL REINFORCING CONTINGENCIES IN TODDLER CHILDREN

Beverly I. Fagot

University of Oregon

Presented to the Society for Research in Child Development Biennial Meeting, New Orleans, Louisiana, March 17 -20, 1977.

Once again, psychology as a discipline, along with society in general is embroiled in controversy over the nature and causes of sex differences. Fortunately the publication of Maccoby and Jacklin's(1974) book on sex differences has helped to focus the debate by bringing together findings, many of which were hard to locate. Maccoby and Jacklin's conclusions have also stimulated debate on the nature of sex differences and the socialization processes behind the development of such differences. The resulting debate has progressed from often misleading citation of accidental findings and continuous repetition of built-in beliefs to more reasoned pro and con arguments, which are much more firmly based upon studies designed to test specific questions.

One of the most controversial statements in the Maccoby and Jacklin (1974) book on sex differences was the statement that " there was surprisingly little differentiation in parent behavior according to the sex of the child" which led to the conclusion by the authors that " the reinforcement contingencies for the two sexes appear to be remarkably similar". However, the studies cited do not actually look at reinforcing contingencies of parents by sex of child and hence, the Maccoby-Jacklin statement is only inferential.

The conclusions reached by Maccoby and Jacklin have been questioned by Block (1975, 1976) who has reanalyzed many of the studies summarized in the sex differences book and come to different conclusions about many of the same issues. In particular, Block questions the finding that parents do not differentially socialize the sexes and backs up her conclusions with a large amount of cross cultural data. Bock suggests that the parental socialization studies reported on by Maccoby and Jacklin were dealing with extremely young children and many of the measures used were either inappropriate for the young child or were so broadly defined as to be almost meaningless. Block (1975) summarized several areas where parents provide different patterns of responses for boys and girls. Both parents emphasized achievement and competition for boys, 2) they encouraged sons to control their affect, 3) were more concerned about punishment orientation, and 4) emphasized independence more for boys. Fathers are stricter with sons and less tolerant of aggression directed toward them, while mothers expect their sons to conform to external standards. Both parents felt their relationship to daughters was characterized by more warmth and physical closeness, 2) they had greater confidence in their daughters trustworthiness and truthfullness, 3)they expect ladylike behavior, i.e. they discourage rough and tumble play and expect cleanliness, 4) they show a greater relunctance to punish daughters, and 5) they encouraged daughters to wonder and think more about life. Mothers tend to restrict and supervise their daughters more than their sons.

PS009163

It is, however, too early to concede that parents treat even very young children alike without regard to sex. It may be true that parenting behaviors are more differentiated once children reach school age, but there is some evidence that even toddlers are differentially treated depending upon their sex. Birns (1976) pointed out that while sex differences in infants are not clear cut, that by three years of age, consistent sex differences in the child's behavior have been found in many settings and many cultures. Birns points out that studies which actually look at the socialization processes, rather than ask for parent reports on their socialization practices, are rare, but that in both homes and schools, adults appear to give differential treatment to boys and girls in several crucial areas. Birns cites studies which suggest that adults distinquish between boys and girls in responses to participation in sex-typed behaviors(Maccoby and Jacklin agree with this finding), to aggressive acts with peers(in studying aggression it is necessary to distinquish between aggression toward adults and aggression toward peers), and to some kinds of dependency behavior.

The importance of looking at parent's reaction to specific child behaviors was underlined by Osofsky and O'Connell's(1972) study of mothers and fathers interaction with five year old daughters. They found that fathers reinforced dependency more than mothers, but that mothers were more controlling. More impressive, the level of dependency exhibited by the child influenced the interaction pattern of the parents with both parents interacting more with the child, physically and verbally, when she exhibited dependent behaviors. To a very large extent, the actual behavior of the child controlled the kind of reaction she received from the parent. Unfortunately, sons were not included in this study, so it is not possible to determine whether there would be a different pattern of responses to dependent and independent choices when the child is a boy.

Maccoby and Jacklin (1974) suggest that earlier findings of sex role differentiation by parents were influenced by parent's stereotypes of what boys and girls should be. They suggest that rating scales and questionnaires are susceptible to stereotypes in ways that behavior observations are not. Their contention is that parents respond to the behavior of the child and do not take into account the sex of the child doing the behavior. The study that I wish to present is an attempt to look at the reinforcing contingencies of parents toward specific child behaviors, but at the same time to try to determine if the sex of the child performing the behavior influences the reaction of the parent.

This study is basically a follow-up of a study by Fagot(1974) who found that two-year old children showed sex differences in their behaviors and that their parents also showed differences which appeared sex determined. However, due to the small sample size, it was not possible to determine whether parents behaved differently to the two sexes because the children behaved differently or whether the parent's reaction to a specific behavior was influenced by the sex of the child.

Method

Subjects

Twenty-four families were enlisted in this study from a group of approximately fifty eligible families. The criteria for participation were that the family must

have only one child between the ages of 20 and 24 months, that both parents must live at home, and that both parents were from 20 to 30 years of age. Twelve families with one boy each and 12 with one girl were selected and were paid for their participation in the study. The families were all white.

Housing was varied, five families lived in university married student housing, six in apartments, while the rest lived in private homes or duplexes. The families varied in income as some were still students while other families had incomes from both parents; however, all parents had been reared in similar middle class backgrounds.

The children had no major medical problems and the parents reported their development had been normal. They ranged in age from 20 to 24 months, with a mean for the boys of 22.9 months and for the girls of 22.7 months. All the children could run and negotiate their home environment with ease. They all had good language comphrension and followed directions without difficulty, although some of the children were difficult to understand when they spoke.

Behavior Checklist

A list of 46 child behaviors and 20 parent reactions were used for this study. The list is the same as that used by Fagot(1974) and is presented in Table 1.

Procedure

Each family was seen in their home with both parents and the child present. They were told that their behavior and the child's behavior was being observed and if they were interested were shown copies of the behavior checklist. Then they were asked to behave as normally as possible. After some adjustment time in which the observer answered all questions and explained the procedure, the parents were asked to ignore the observer and the observation period began. The parents were asked to stay within the house, due to the difficulty of comparing intervals of good vs bad weather, but otherwise they were encouraged to continue their normal activities.

Five 60 minute periods of observation were completed for each of the twenty four families. The five hours of observation were completed within a five week period for all families, although due to illness in some cases this meant two observations in one week due an observation missed the previous week.

The observer first coded the child's behavior and then the reaction to the behavior with a single observation taking place once every 60 seconds during a 60 minute observation period. This meant there were a total of 300 observations per child. The observation times were arranged to avoid the child's nap time and also the family dinner hour. The observer followed the child, if necessary, from room to room. However, the children tended to stay within the same room as their parents, so most of the observations took place in the living room or kitchen.

Two observers were used in this study, both were undergraduate majors in psychology, and one was male and one female. Reliability ratings were made using video tapes with agreement on the child behaviors reacing 93% and on the parent reactions, 85% of all the ratings. To be coded as agreement, each observer had to give the same rating. Four families were observed, two sessions by one observer and three by the others so the rankings of frequencies of specific child and parent behaviors could be compared. Rank order correlations were computed on the rankings of the behaviors for each of the observers on two different days and with the two observers, again on separate days. The resulting correlations between the rankings of the two observers did not differ significantly from the ranking of each observer with himself on separate days.

Parent Questionnaires and Stereotyping Ratings

After the observations were complete, each parent was asked to rate the 46 child behaviors as appropriate for girls, boys, or appropriate for both sexes. Each parent also filled out a short questionnaire concerning socialization practices and values concerning sex roles.

Rating of Child Behaviors by Experienced Judges

Five experienced judges were asked to select from the list of 46 child behaviors, those behaviors which showed active motor play, dependency upon adults, and aggression. These three areas have often been cited as showing sex differences from an early age.

Results and Discussion

Sex-preferred Child Behaviors

To test for differences between the sexes, t tests were computed on the differences in frequencies of the child behaviors. The 46 behaviors were combined into 31 categories on the basis of similarity to insure that each category contained a representative sample of each sexes behavior. There were a total of seven behaviors that showed significant sex differences(see Table 2). Boys played more with blocks, manipulated objects more frequently, and played with transportation toys. Girls played with soft toys and dolls, danced, asked for help and dressed up more often than boys. These seven behaviors will be called sex-preferred behaviors in the rest of the paper. These results replicate the findings of Fagot(1974) in terms of sex preferred behavior among toddlers.

Sex- stereotyped Child Behaviors

Parents were asked to rate the check list of child behaviors as appropriate to girls, boys,or both sexes. Five behaviors were rated as significantly different for boys and girls, with 50% of the sample rating the behavior as appropriate to one sex. The two behaviors rated more appropriate for boys were rough and tumble play and aggressive behavior; neither of these behaviors showed a significant sex difference in frequency of occurrence. The three behaviors rated as appropriate for girls by parents were doll play, dress up, and dancing. All three of these behaviors showed significantly more frequent occurrence for girls.

Fagot (1973) had college age subjects without experience with children rate the behavior checklist using the same instructions as used with the parents in this study. The college students rated rough and tumble play, aggressive behaviors, and play with transportation toys as more appropriate for boys. They rated doll play, dressing up, and looking in the mirror as more appropriate for girls. The high degree of similarity between college students who had little contact with young children and the parents of young children in their sex stereotyping ratings suggests that sex stereotyped concerning the behavior of young children is well learned in our society. The fact that the stereotypes do not coincide too well with the children's behavior, especially in the the case of behaviors considered inappropriate for girls, suggests that Maccoby and Jacklin are right that we should beware of assuming that ratings necessarily reflect the actual behavior occurring in the family.

Aggressive Behaviors

Only one behavior was considered by the judges to represent aggressive behavior and that was the category of hit, throw, push, scream, etc. This would be aggression directed toward the parent as peers were not present during the observations. There were no sex differences in the occurrence of aggressive behaviors. This was a rare event in this sample or at least during the period of observations, occurring only 160 times out of a total of 7200 observations.

Adult Dependency Behaviors

Three behaviors were rated by the judges to represent adult dependency, following the parent around, asking for help, and helping the parent with a task. Girls did ask for more help than boys, but the other two tasks did not show significant differences in occurrence.

Large, Motor Behaviors

Four behaviors were rated by the judges as representing large, motor activities; running, jumping, etc, climbing, rough house play, and riding trikes, scooters. None of these behaviors showed any sex differences in occurrence.

Sex Determined Parental Consequences

Reaction to the child's behavior was categorized as positive(mother or father initiate, join play, praise child, give physical comfort, or guide and explain), negative (father or mother criticizes or restricts, stops plays, physically punishes) or neutral (parents observes or does not interact). A total of 29 of the 46 child behaviors showed a sufficent frequency of occurrence by both sexes to test for sex determined differential consequences. Two way analyses of variance (sex of child, sex of parent) were carried out separately for each of the 29 behaviors, for the three parental consequences. The dependent variable (score) was the proportion of responses in a parental reaction category compared to all responses to the behavior for each child. In this way baseline differences in the frequency of responses for the behavior are accounted for in the score. The parental responses(positive and negative) and the comparisons between the mother and father are summarized in Table 3. It can be seen that when all twenty nine behaviors are considered, it looks as if girls and boys are being treated in a very similar

fashion. It also looks as there are few differences in the way that mothers and fathers are responding to their sons and daughters.

However, when we look at those behaviors preferred by the two sexes, or rated by judges or parents as important to sex role socialization, a different picture emerges. The results of parental responses to behaviors in the five categories are presented in Table 4.

When parental response to the seven sex-preferred behaviors is examined, it appears that the parents are heavily influenced by the sex of the child. Parents responded significantly more positively when the child engaged in a behavior preferred by their own sex in five of the seven cases. Boys did not dance or dress up frequently enough to make a reliable comparison, but parent response to the girls when they engaged in these behaviors was overwhelmingly positive. On the other hand, when the child engaged in a behavior preferred by the opposite sex, the parental response was significantly more negative in three of the seven cases. Boys were punished for feminine behaviors significantly more than girls for masculine choices.

It is interesting to note that not only do many of the parents' sex stereotypes fail to show sex differences in occurrence, but the parents do not react differentially to the behaviors. Only in the case of doll play, where boys are criticized and girls given more positive feedback was there a significant sex determined consequence by the parents.

Parents did not show differences in their respon ses to aggressive behaviors. Parents did criticize girls more often when they participated in the large motor activities of running, jumping, and climbing. Parents encouraged girls calling upon them for help, they encouraged girls to help with tasks, and they gave girls more positive feedback for following them around. The fathers in particular encouraged their daughters proximity, while the mothers were more encouraging of their daughters attempts to help.

When specific, sex role related behaviors are examined, it is apparent that even toddler age children are receiving sex determined responses to their behaviors. In the parent questionnaire, masculine behaviors were defined in terms of play with certain toys and with an emphasis on physical activity. Parents are able to control these behaviors effectively, by providing toys they consider appropriate for boys and by joining with the boys in rough and tumble play. Parents are much less specific in their definitions of feminine behaviors. They see doll play as feminine, but other behaviors mentioned are often styles of play, i.e. lack of aggression, dependency behaviors. Parents when asked do not say they want dependent quiet girls. Instead they state their feelings in terms of feeling more fear for girls, in terms of feeling that girls need more warmth, that girls need more help. At the same time, mothers of toddler girls make similar comments as found in Block's study of older children. They trust girls more than boys. they find them a bigger help, and they find them easier to care for.

Some of Block's findings with older children are supported in this study of toddler children. Parents of boys were encouraging indepedence and discouraging dependence upon adults. Parents of girls are discouraging behavios such as running, jumping and climbing which mire be considered "unladylike" and they encourage physical closeness of their daughters. Parents do not show differential reaction to aggressive behaviors nor do they show a difference in affection tc the sexes. They do show quite distinct, sex determined differences in their reaction to sex preferred activities.

In attempting to study sex determined differences in socialization it is necessary to define categories of particular relevance for as Maccoby and Jacklin point out similarities in treatment outweigh differences. However, in a few critical areas, it appears that we are starting to accumulate consistent findings of differential treatment of the sexes. It is not surprising that these differences are confined to a few key areas for we know that sex similarities are many times greater than sex differences, but the few areas where we do find significant differences have great consequences for the developmental process.

References

Birns, B. The emergence and socialization of sex differences in the earliest years. Merrill-Palmer Quarterly, 1976, 22, 229 -254.

Block, J.H. Another look at sex differentiation in the socialization behaviors of mothers and fathers. Paper for Conference on New Directions for Research on Women. Madison, Wisconsin, 1975.

Block, J.H. Assessing sex differences" Issues, Problems, and Pitfalls. Merrill-Palmer Quarterly, 1976, 22,

Fagot, B.I. Sex-related stereotyping of toddler's behaviors. Developmental Psychology, 1973, 9, 429.

Fagot, B.I. Sex differences in toddlers' behavior and parental reaction. Developmental Psychology, 1974, 10, 554 -558.

Maccoby, E.E. & Jacklin, C.N. The Psychology of Sex Differences. Stanford: Stanford University Press, 1974.

Osofsky, J.D. & O'Connell, E.J. Parent- child interaction: Daughters' effects upon mothers' and fathers' behaviors. Developmental Psychology, 1972, 7, 157 - 168.

Table 1

Observation Check List: Sex Role in Toddlers

Behaviors	Parental Reaction
1. Rough-house play	A. Mother initiates play
2. Running, jumping	B. Father initiates play
3. Play with transportation toys	C. Mother joins play
4. Play with stuffed animals, soft matls.	D. Father joins play
5. Play with dolls	E. Mother praises or speaks favorably
6. Dance	F. Father praises or speaks favorably
7. Play with pots and pans, dishes, kitchen gadgets, silverware	G. Mother criticizes or restricts behavior
	H. Father criticizes or restricts behavior
8. Play with pull toys, push toys	I. Mother stops play
9. Climb	J. Father stops play
10. Play with blocks	K. Mother punishes
11. Puzzles, small toys requiring hand-eye coordination	L. Father punishes
	M. Mother gives physical comfort
12. Watch TV	N. Father give physical comfort
13. Trikes, riding toys, etc.	O. Mother helps or guides
14. Play with wagons	P. Mother helps or guides
15. Listen to music	Q. Mother explains
16. Sing	R. Father explains
17. Look at books	S. Either parent observes or watches
18. Listen to story	T. Neither parent interacts - no contact
19. Play verbal games, talks to self or someone else	
20. Dress up like mother, or other adult females	
21. Dress up like father or other adult male	
22. Follow parent around	
23. Aggressive behavior, hitting, throwing things	
24. Play with animals	
25. Play with real phone or toy phone	
26. Play with light switches, doorknobs, radio, TV knobs	
27. Explores house or yard	
28. Hugs, kisses, shows affection	
29. Rocking horse, Wonder horse, etc.	
30. Eat, bottle or breast feed, drink	
31. Throw balls	
32. Have clothes changed, go potty, groomed	
33. Help parent with some adult activity	
34. Peek -a- boo games, ring around rosy, etc.	
35. Plays with food	
36. Sitting quietly, standing doing nothing	
37. Asks mother for help	
38. Asks father for help	
39. Playing with clothes, shoes, etc.	
40. Playing with miscellaneous things: broom, paintbrush, scissors, etc.	
41. Playing on swing	
42. Drawing, scribbling	
43. Gets hurt, pushed, trips, falls, cries	
44. Takes a bath, water play	
45. Plays in sandbox, digs in dirt	
46. Look in mirror	

Table 2

Summary of t tests of Significant Frequency Differences Between Boys and Girls

Behavior	Frequency	
	Boys	Girl
Play with dolls, soft toys	31	197***
Dance	3	68***
Ask for help	150	398**
Dress up	2	75***
Play with blocks	79	16*
Manipulate objects	790	410***
Transportation toys	325	101**

Note - 3600 behavior observations for each sex, 300 per child

* $p < .05$

** $p < .01$

***$p < .001$

Table 3

Summary of Parental Reactions to 29 Most Frequent Child Behaviors

Behaviors	Parental reaction by sex of child		Parental reaction by sex of parent	
	positive	negative	postive	negative
1. Rough house play	no diff.	no diff.	no diff.	no diff.
2. Running, jumping	no diff.	girls	no diff.	no diff.
3. Play with transportation toys	boys	no diff.	no diff.	no diff.
4. Play with soft toys	girls	boys	no diff.	father > mother
5. Play with dolls	girls	boys	no diff.	father > mother
6. Manipulates objects	no diff.	no diff.	no diff.	no diff.
7. Play with pull, push toys	boys	no diff.	no diff.	no diff.
8. Climb	no diff.	girls	no diff.	no diff.
9. Play with blocks	boys	no diff.	no diff.	no diff.
10. Puzzles	no diff.	no diff.	no diff.	no diff.
11. Watch TV	girls	no diff.	no diff.	no diff.
12. Riding toys	no diff.	no diff.	no diff.	no diff.
13. Look at books	no diff.	no diff.	no diff.	no diff.
14. Play verbal games	no diff.	no diff.	no diff.	no diff.
15. Follow parent around	girls	no diff.	father > moth.	no diff
16. Aggressive behavior	no diff.	no diff.	no diff.	no diff.
17. Explores	no diff.	no diff.	no diff.	no diff.
18. Hugs, kisses	no diff.	no diff.	no diff.	no diff.
19. Eat, feed	no diff.	no diff.	no diff.	no diff,
20. Throw ball	no diff.	no diff.	no diff.	no diff.
21. Have clothes changed	no diff.	no diff.	no diff.	no diff.
22. Helps parent with adult activity	girls	boys	mother > fath.	no diff
23. Plays with food	no diff.	no diff.	no diff.	no diff.
24. Sits quietly	no diff.	no diff.	no diff.	no diff.
25. Asks for help	girls	boys	no diff.	no diff.
26. Plays with various object	no diff.	no diff.	no diff.	no diff.
27. Draws, colors, etc.	no diff.	no diff.	no diff.	no diff.
28. Gets hurt	no diff.	no diff.	no diff.	no diff.
29. Look in mirror	no diff.	no diff.	no diff.	no diff.

Table 4

Summary of Parental Reaction to Different Categories of Child Behavior

Sex Preferred Activities

Behavior	boys positive	boys negative	girls positive	girls negative
Block play (male preferred)	yes			no
Manipulate objects (male)	no			yes
Transportation toys (male)	yes			no
Play dolls, soft toys (female preferred		yes	yes	
Dance (female)	too few occurrences in boys to test significance - response to girls when dance, overwhelmingly positive			
Ask help (female)		yes	yes	
Dress up	too few occurrences in boys to test significance - response to girls when dress up was positive			

Sex-stereotyped Activity (Parent Ratings)

Behavior	boys positive	boys negative	girls positive	girls negative
Rough-tumble play (male)	no			no
Aggressive behavior (male)	no			no
Doll play (female)		yes	yes	
Dress up (female)	too few occurrences in boys to test			
Dancing (female)	too few occurrences in boys to test			

Sex-stereotyped Activity (College Student Ratings)

Behavior	boys positive	boys negative	girls positive	girls negative
Rough-tumble play(male)	no			no
Transportation toys (male)	yes			no
Aggressive behaviors (male)	no			no
Doll Play (female)		yes	yes	
Dress up (female)	too few occurrences in boys to test			
Look in mirror (female)		no	no	

Motor Activities

Behavior	boys positive	boys negative	girls positive	girls negative
Running, jumping	no			yes
Climbing	no			yes
Rough house play	no			no
Riding trikes	no			no

Table 4 continued

Parental Reactions to Different Categories of Child Behavior

Adult Dependency Behaviors

Behavior	positive	negative	positive	negative
	boys		girls	
Ask for Help		yes	yes	
Help Adult with Task		yes	yes	
Follow parent around			yes	

Aggressive Behavior

Behavior	positive	negative	positive	negative
	boys		girls	
Aggressive behaviors(hit, push, throw things, scream, yell, shout)	no			no